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Elements of a Service Referral Algorithm for a Frontline Decision Support System for Washington WorkFirst

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a Frontline Decision Support System
for Washington WorkFirst**

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I. INTRODUCTION

On August 22, 1996 President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act which reformed the nation's welfare laws. A new system of block grants from the federal government to the states named Temporary Assistance for Needy Families (TANF) was created. The fundamental requirement for states receiving TANF block grants is to have most recipients working within two years of first receiving TANF benefits. States are largely free to choose means to this end.

The Washington state program for moving TANF beneficiaries into work is called WorkFirst (WF). WF is a collaborative effort between two state agencies: Department of Social and Health Services (DSHS) and Employment Security Department (ESD).

The Workforce Investment Act (WIA) of 1998 mandated establishment of one-stop centers for employment services in each workforce investment area. In Washington state the one-stop centers are called WorkSource centers. WorkFirst programs are required partners in one-stop centers. During the current transition phase to full one-stop operation in Washington state, WF participants receive services from both DSHS and ESD. WF programs have yet to be fully integrated into the WorkSource centers.

Successful implementation of one-stop centers requires new management tools and techniques to help staff meet the challenges presented by the one-stop environment. One-stop center staff, assembled from staff of several previously independent programs, may be required to provide advice and services to clients with a wide range of needs. The Frontline Decision Support System (FDSS) is a set of administrative tools being developed to help frontline staff successfully operate in one-stop centers.

The primary goal of FDSS is to assist staff in quickly assessing customer needs and referring customers to the most effective reemployment services. The FDSS tools are divided into two groups: the job search module and the service referral module. The focus of this paper is on the service referral module.

The next section of this paper reviews the typical client flow for TANF applicants entering WF in Washington state. This is followed by a discussion of the sample available to analyze use of reemployment services by WF participants. The subsequent section reports on patterns of service use observed for WF clients. The final section is a conclusion which outlines the prospects for an FDSS service referral algorithm for WF participants in Washington state.

II. THE WORK FIRST PARTICIPANT FLOW AND FDSS

Entry to the Washington WF program begins with application for TANF cash assistance. This is currently done at a DSHS Community Service Office (CSO). Clients seeking TANF cash assistance at a WorkSource center are referred to the DSHS CSO. Customers receiving cash TANF assistance are said to be “on a grant.” Figure 1 graphically depicts the participant flow after application for TANF.¹

The following discussion of the participant flow is the official “12 stage” view of how the process should unfold for a participant. After restating the official description of each step, we describe how the associated activities could be tracked with data recorded using WF service component codes. These codes are stored in the DSHS JOBS Automated System (JAS) data system, the full list of codes is given in Table 1.

We also indicate at each stage whether the particular service or services are currently delivered by DSHS or ESD. For interim development of FDSS, during the current transition to full one-stop center operation in Washington, it is crucial to know the agency delivering services. The aim of this section is to identify the points in the participant flow where elements of the FDSS would be useful. At this time FDSS will only be available for services offered through the ESD.

Twelve Stages in Becoming and Remaining Independent from TANF

All applicants for TANF cash assistance are assigned to a case manager (CM). The prime aim of the CM is to promote independence of the family unit from public assistance. The main means to this end is employment for the applicant. Depending on whether or not they have recent employment experience, new TANF applicants are put into one of two tracks: a normal path and a fast track.

The best information available in JAS to identify the participant inflow date is the WF client key creation date.

1. Orientation, Screening & Eligibility: DSHS gives participants an overview of the program, screens them for next steps and determines TANF/SFA eligibility.

No WF component codes record provision of orientation, screening, or eligibility evaluation.

DSHS provides all of the activities.

¹ Figure 1 and the outline for the “twelve stages for becoming and remaining independent from TANF” were drawn from the Washington WorkFirst web site <http://www.wa.gov/WORKFIRST/about/12stages.htm>.

2. Fast Track: For TANF applicants who have recent job history, DSHS makes a fast track referral to ESD for intensive job search services. The applicant can begin job search before TANF eligibility is determined.

No component code specifically records fast track referral. Such a referral could be inferred by the timing of the code RI (meaning referred to ESD) relative to the WF inflow date. This could be further corroborated by the presence of earnings recorded in the UI wage records system (TAXIS - tax information system) for the quarter of WF inflow.

DSHS provides all of the activities.

3. Diversion: For applicants facing a temporary emergency, DSHS explores alternatives to TANF cash assistance (such as child support, re-employment or a diversion grant).

Component code XB indicates pursuit of alternative cash assistance. XD indicates that the customer has been moved to a DVR/DDD plan (?). There are component codes called deferrals, for no child care available (XC) and caring for a child with special needs (XN). If the diversion is to non-subsidized re-employment then an RI (referral to ESD) should appear, but there is no indicator that this is different than a Fast Track (stage 2) referral.

DSHS provides all of the activities.

4. Individual Responsibility Plan: DSHS develops (and regularly updates) a written plan to show the participants' responsibilities, work requirements and approved services.

This is a confidential record established and updated by DSHS. The information has not been made available to the FDSS project.

DSHS provides all of the activities.

5. Minor Parents/Teens: DSHS works with minor parents and teens to complete their high school education.

Together with the age of the customer, component codes BE (basic education), HS (high school), VE (vocational education), and GE (general education diploma) are indicators of this stage. There is a relevant deferral code XP (parenting skills training).

DSHS provides all of the activities.

6. Alternative Services: DSHS may temporarily defer job search while a family deals with family violence, substance abuse or homelessness or applies for SSI benefits.

This stage may be indicated by deferral codes: XB (pursuing SSI/VA or other cash benefits), XF (domestic relations problems), XH (homelessness), XM (alcohol, drug, anger, or

medical problems). A deferral may also be given to someone providing care to an incapacitated older citizen (XR).

DSHS provides all of the activities.

7. Job Search/Pre-employment Training/LEP Pathway: ESD provides job search, job search workshops and helps participants access college-approved pre-employment training (for above average wage jobs from an employer or industry that commits to hiring or giving hiring preference to graduates). DSHS may refer limited-English proficient participants to LEP Pathway contractors for up to one year of combined ESL and job search or another work activity.

The initial job search occurs at this point in the participant flow, whether clients flow from the fast track or from other preliminary services. Relevant services at this point are initial job search (JI), a job search workshop (JW), and continued job search (JS). In rare cases clients might be referred to on-the-job training (OT) at this stage. Clients failing to gain reemployment within 12 weeks of being referred to ESD are referred back to DSHS (RC, RB, PR) for further evaluation.

ESD provides all of the activities.

8. Employment: The goal is full-time, unsubsidized, living-wage employment. CTED administers the Community Jobs wage subsidy program and coordinates business outreach for the four core state agencies.

Achievement of non-subsidized employment should be indicated by component codes PT (part time), FT (full time), SP (self-employed part time), and SF (self-employed full time). The latter two are rarely used. Subsidized employment should be indicated by either CJ (community job) or OT (on-the-job training).

It is not clear whether ESD or DSHS is responsible for recording these codes.

9. Post-Employment Services: For those who work 20 hours or more a week, DSHS offers childcare assistance, support services and help with keeping a job. ESD offers job or college referrals to find a better job. The community and technical college system offers help with accessing training that can lead to higher wages and approves training plans.

Post employment services are available to those participants with outcomes coded PT, FT, SP, SF, OT, or CJ. These services include PS (WorkFirst post-employment labor exchange–WPLEX, a telephone call center for clients to access information from their homes), LE (labor exchange), RS (employment retention for those in PT or FT), and CA (career advancement).

ESD provides all of the activities.

10. Evaluation: For participants who finish job search without finding jobs, DSHS evaluates their job search efforts and the local labor market, then updates the participant's individual responsibility plan.

For clients failing to gain employment with ESD assistance after 10 to 12 weeks. DSHS conducts an evaluation designed to identify specific barriers to employment such as drug or alcohol dependency, domestic problems, health problems, criminal record, child care problems, and transportation problems. DSHS attempts to resolve these problems and return the client to ESD for job search activities and assistance.

ESD provides all of the activities.

11. Work Preparation: DSHS refers participants who finish job search without getting a job to one or more of these activities, delivered by other state agencies, community based organizations or Private Industry Councils (PICs).

Under WIA, the PICs are now Workforce Investment Boards (WIBs). The set of possible activities includes: BE (basic education), on-the-job training (OT), community jobs (CJ), work experience (WE), structured community service (XS), pre-employment training (PE), vocational education (VE), job skills training (JT), ET (entrepreneurial training), ES (English as a second language).

DSHS refers clients for work preparation. However, it is unclear whether DSHS decides what service customers are to receive or WIB staff makes the decision.

12. Re-employment Services: ESD provides rapid re-employment services to current WorkFirst participants or to former WorkFirst participants who lose their jobs. Participants are connected to fast track job search services when they apply for Unemployment Insurance or TANF. Both current WorkFirst participants and former ones who have lost their jobs may also be referred to re-employment.

This stage is similar to stage 7 in the participant flow. Relevant services at this point are initial job search (JI), a job search workshop (JW), and continued job search (JS). In rare cases clients might be referred to on-the-job training (OT) at this stage. Presumably, clients failing to gain reemployment within 12 weeks of being referred to ESD are referred back to DSHS (RC, RB, PR) for further evaluation.

ESD provides all of the activities.

III. THE WORK FIRST SAMPLE

To begin to understand the effect of services on participant outcomes, principally employment, we analyzed the sequence of activities that participants engaged in. Different paths were identified to determine which sequence of activities led to a successful outcome and which did not. Our sample for analysis was drawn from the JOBS Automated System (JAS). Both DSHS and EDS currently use JAS to record activity information about WF clients. In addition to containing records of component codes as listed in Table 1, JAS includes client self-reported data on earnings and employment.²

The purpose of the FDSS service-referral algorithm is to help inform the decisions made by the front-line staff in referring clients to services. In order for these tools to be useful, they must be based on accurate information. The component codes must reflect the actual services received by the clients, the outcome measures must be aligned with the performance outcomes adhered to by staff, and viable referral options must be available at each key decision point. The analysis using administrative data provides a way to assess the process by which referrals are made and to validate the accuracy of the data by reviewing the results of the analysis with staff and other informed individuals.

At this stage of the analysis, it appears that the component codes recorded on the administrative records of individual participants offer a reasonably accurate accounting of the activities in which they participated. However, it is questionable whether the appropriate performance outcomes can be replicated using only the JAS data. Specifically, it is important to properly specify whether the participant is “employed and off of TANF.” The component code data will permit us to identify WF clients who have returned to work. However, in our discussions with DSHS staff, it has become clear that a limited extract from the ACES data file is needed to identify if and when a TANF client is drawing cash assistance. Furthermore, without the ACES data, it is difficult, if not impossible, to accurately identify people who return to WF after being off of TANF for a time. The ACES information has not been made available to the Upjohn Institute, which leaves us with the inferior option of approximating the outcome measure using the JAS data. Therefore, the analysis that follows, particularly with respect employment outcomes to returnees, should be viewed as preliminary until we receive the ACES data.

The tools in FDSS should support achievement of WIA performance targets. To do so the outcome measure used to develop FDSS tools should be harmonized with the one used for performance monitoring.³ To achieve this the Washington State Employment Security Department should provide to the Upjohn Institute a limited extract from the ACES data file.

² However, the earnings and employment data are not updated in a consistent fashion (Burley, 1999).

³ In particular FDSS tools should be harmonized with performance measures as reported by WIA areas at: <http://www.wa.gov/WORKFIRST/statestaff/PerformanceMeasures.htm>.

The sample for the analysis includes WF participants who entered the program between January 1, 1998 and April 30, 2000. During this period, there were 76,863 participants, of which 48,537 had at least one recorded activity as indicated by the presence of at least one component code on the individual's administrative record. The majority of participants, 28,852, had at most one component code on any one day, while the remainder, 19,685, had more than one component recorded on the same day. This distinction is important since with this data set it is possible to record the sequence of activities only if the activities occur on different days.

Therefore, unless otherwise indicated, we will use the sample of 28,852 participants who had only one activity on a single day to analyze the sequence of activities. We found that 9,030 of the 28,852 participants (31%) were referred to ESD (code RI), according to component codes. We also found that 9,205 participants (32%) were recorded as getting a non-subsidized full time or part time job (codes PT or FT).

IV. PATTERNS OF USING EMPLOYMENT SERVICES

As discussed above, some of the decisions about services for WF clients are made by DSHS while others are made by ESD. WF is a program which is a partner in the WorkSource one-stop center, but at the current stage of one-stop center implementation FDSS can support only ESD decision making for WF participants. When WF clients are at a WorkSource Center, ESD decisions could be usefully supported at three points in the participant flow. Referring to Figure 1, those stages are numbered 7, 9, and 12.

From Stage 7

To examine stage 7, we start with the 9,030 who were referred to ESD (code RI). Table 2 gives frequencies for the 10 most popular component codes following the first RI, the 10 most popular codes following that code, and so on for five codes after the first referral to ESD as recorded by RI. Among the 9,030 persons with an RI, 7,642 or 84.6 percent get another component code recorded.

Referring to Tables 1 and 2, we see that among the 10 most popular codes recorded immediately after the first RI, three are job search codes: JW (job search workshop), JI (initial job search), and JS (continued job search); two refer to successful employment in a non-subsidized job: FT (full-time job) and PT (part-time job); four indicate a discontinuation of job search: RN (no show), RB (referred back to DSHS early), XU (DSHS deferral), SA (DSHS sanction); and one means referred again to ESD again (RI). None of these codes denotes referral to other employment services. This is to be expected since ESD can only refer client to services other than job search if employment is achieved (either PT or FT).

A second component code was recorded for 5,928 or 77.6 percent of those with a first code. Nine of the 10 most popular second codes after the first RI are the same as the first code after RI. Joining the group is PR which means an automated referral back to DSHS. Notably the

most frequent second codes denote job search (JS, JI, JW) and non-subsidized employment (PT and FT). None of these codes denotes referral to other employment services.

A third component code was recorded for 4,265 or 71.9 percent of those with a second code. Again, these codes denote either employment, continued search, or suspension of job search and return to DSHS. Achievement of non-subsidized full time employment (FT) is the most frequent code in this group.

Lists for the fourth and fifth components indicate other orderings of the same essential group of codes.

From Stage 9

To examine patterns of component codes after finding employment, we start with the 9,205 who found a non-subsidized full time or part-time job (codes PT or FT). The examination of component codes proceeds from the first time a PT or FT code was recorded.

Table 3 gives frequencies for the 10 most popular component codes following the first PT or FT, the 10 most popular codes following that code, and so on for five codes after the first occurrence of PT or FT. Among the 9,205 persons with a PT or FT, 4,291 or 46.6 percent get another component code recorded.

Among the top six codes after the first PT or FT, two are post employment services codes (PS and RS), two are additional employment codes (PT and FT), and two are for ESD services (RI and JS). The remaining four codes among the top 10 are DSHS exemptions from job search or referrals to other services. It is interesting to note that two of the four post-employment services listed in Table 1 are not among the top 10 services following the first PT or FT. It is important to note that codes for career advancement services (CA) and labor exchange (LA) do not appear in the top 10 following PT and FT in state-wide data.

There were 2,102 participants with a second code after the first PT or FT, accounting for 49 percent of those with a first code. The most frequent among the second codes recorded following the first PT or FT are like the first code. These include two post-employment services codes (RS and PS) and two employment codes (PT and FT). Also in the top 10 codes are four job search codes (RI, JS, JI, and JW), and two codes for referred back to DSHS (RB and RN).

JAS recorded a third code for 1,191 people or 56.7 percent of those with a second code. The third most frequent codes after the first PT or FT comprise the same list as the second but in a somewhat different order. Further employment (PT and FT), use of ESD job search assistance (RI, JI, JS, and JW) and use of post employment services (PS and RS) remain on the list.

Lists for the fourth and fifth components include the DSHS code for sanctions (SA). Otherwise, these lists are simply reordered combinations of the same codes most frequently observed in the first, second and third lists.

From Stage 12

The pattern of services at stage 12 are essentially the same as that at stage 7. Some further insight may be gleaned by considering a path analysis of services beginning from the sequence RI-RI

Paths Following Referral to ESD

Table 4 presents the top 40 sequences of component codes that follow the first referral to ESD (RI code), along with other selected paths. After an RI is recorded, it is most common to have no further component codes. Positive outcomes FT and PT are fourth and fifth on the list, respectively.

From column 1 in Table 2, we see that the most common service following the first RI is JW. Table 4 shows that JW starts a variety of sequences including paths numbered 11, 16, 18, 20, 21, 22, 32, 34, 35, 40, 56, and 75.

Path 11 ends in a positive outcome with RI followed in order by JW, JS and FT. Path 11 is taken by about 1 percent of the 9,030 persons examined. Path 16 is similar to path 11 with RI followed by JW, JI and FT.

The longest paths with positive outcomes observed in Table 4 are numbered 32, 56 and 75. The first ends in non-subsidized full time employment; the last two end with job retention services.

Paths Following Employment (PT or FT)

Table 5 examines selected paths of component codes following non-subsidized employment (PT or FT). In our sample, 53.4 percent of people are given no further codes after PT or FT.

The next most common sequence is includes job retention services (PS and RS). Job retention component codes are also terminal codes in paths 18, 19, 27, 29, 32, 34, 36, 37, 38, and 40. Job retention codes precede a terminal employment status in paths 25 and 39.

The longest observed paths involve a referral to ESD (RI) followed by job search and then full time employment.

Observations Excluded from Analysis

Since the time sequence of multiple services on a given day is impossible to sort out using the JAS data, we excluded from our analysis 19,685 customers who received more than one service on any given day. Table 6 records the number of days in which two or more services

were received on a given day. Since the same person may have more than one day in which services were recorded, we refer to the observation as a person-day. Obviously, with 29,832 observations on 19,685 clients, the average number of days of activities for each client was 1.52. Examining the table reveals that most of the people with multiple services per day received only two services in a single day. Two services per day were recorded for 89.1 percent of the person-days, while three services per day were recorded for 9.7 percent of the person-days. The greatest number of services received on any day in our sample was six.

IV. CONCLUSION

Analysis of the activities of WorkFirst clients in the state of Washington reveals a limited number of distinct alternatives for service referral. Using historical data on services received by Washington WorkFirst clients during the period January 1, 1997 through the end of 1998, we identified three stages that are relevant for supporting referral decisions. These stages are numbered 7, 9, and 12 in figure 1. The possibilities for using a service-referral algorithm at each of the three stages are as follows.

- At stage 7, after referral to ESD, the most popular patterns of services involve job search activity and referral back to DSHS. Among those clients referred by DSHS to ESD, FDSS could provide early identification of those clients for whom: (1) job search alone is not likely to result in reemployment within 12 weeks, and (2) job search alone is likely to achieve employment within 12 weeks. A third group for whom short term job search has an indeterminate effect will also be identified. Such a triage should also be possible with a 12 month view.
- At stage 9, after achievement of non-subsidized part-time or full-time employment, the most popular ESD services used are employment retention (code RS) and call center labor exchange information (PS). There is no evidence of significant use of other ESD services by WF recipients who gain employment. FDSS could provide a tool for ESD to identify: (1) those participants for whom job retention services such as PS and RS can be expected to perpetuate steady employment and reduce TANF dependency, and (2) those for whom retention services are not likely to improve the odds of steady employment. A third group for whom retention services have an indeterminate effect could also be identified. Unfortunately models to identify those who would benefit most from the post employment services career advancement (CA) and labor exchange (LE) cannot be developed due to the small number of people receiving such services.
- At stage 12, FDSS tools similar to those available at stage 7 could be prepared. The models at stage 12 will be somewhat less precise, as the sample size available for estimation is smaller than at stage 7.

In closing, we repeat a point made in our earlier discussion of data. The tools in FDSS should help WorkSource Center staff achieve the WIA performance targets. To do so, the outcome measure used to develop FDSS tools should be harmonized with the one used for

performance monitoring. The algorithms developed under FDSS are only as good as the data available to estimate the behavioral relationships. At present, the analysis and the development of the algorithm are handicapped by the inability of the FDSS project research team to access the same data files that are used by the State of Washington to calculate performance measures and to identify those who return to WorkFirst. The Upjohn Institute research team cannot develop the best possible tools for the staff of the WorkSource Centers unless it has access to a limited extract from the ACES data file. Specification for such an extract is provided as Appendix A to this paper.

REFERENCES

Burley, Mason. 1999. "Analysis of WorkFirst Employment Data," mimeo. Olympia: Washington State Institute for Public Policy (June).

<http://www.wa.gov/WORKFIRST/about/12stages.htm>

<http://www.wa.gov/WORKFIRST/statestaff/PerformanceMeasures.htm>

APPENDIX A

ACES Data Extract Specification

To harmonize the outcome measure used to develop FDSS tools for Washington WorkFirst with the outcome measure used by the state for performance monitoring, the Washington State Employment Security Department should provide the W.E. Upjohn Institute for Employment Research with the following limited extract from the ACES data file.

The data extract should include all Washington WorkFirst participants during the time period: January 1, 1997 to March 31, 2000.

Data should be provided on the following five variables:

ACES Variable Name	ACES Variable Description
AU-NUM	ACES case number
CL-ID-NU	ACES client ID number
JAS_ID	JAS client identifier
BM	Benefit year-month
AD_CHILD	Indicator of whether the client is a child or adult

Table 1. Work First Service Component Codes from the DSHS JAS Data System

Working

CJ Paid Community Jobs-Subsidized
 FT Working Full Time - 30+ hours/wk
 PT Working Part Time - 29 less hours/wk
 OT On the Job Training - Subsidized
 SF Working Full Time - 30+ hrs/wk SE
 SP Working Part Time - Self-employed

Post-Employment

CA Career Advancement
 RS Employment Retention
 LE Labor Exchange
 PS WPLEX contact

Looking For Work

JI Initial job search
 JS Job Search
 JW Job Search Workshop

Preparing for Work (Education/Training)

BE Basic Education
 CC Caring for child of WF Participant
 ES English as Second Language
 ET Entrepreneurial Training
 GE General Education Diploma
 HS High School
 JT Job Skills Training
 PE Pre-employment training
 VE Vocational Education
 WE Work Experience
 XS Structured Community Service

Deferrals

XB Pursuing SSI/L&I/VA or other
 XC No child care available
 XD In a DVR/DDD plan
 XF Fam/Domestic Violence Intervention
 XH Resolution of Homelessness
 XM Anger/Drug/Alcohol counseling
 XN Caring for a child with special needs
 XP Parenting skills, nutrition classes, etc.
 XR 55 & older caretaker relative

Referrals (Refer to)

ER Entrepreneurial Evaluation
 LP Limited English Pathway for refugee
 RA Community/technical College
 RI ESD
 RO Other
 RP PIC/WTW
 RT Tribal Services
 SR Referred for Drug/alcohol assessment

Referrals (Refer Back)

PR Processing returned referral
 RB Referred back early
 RC JW/JS completed - no job
 RE Obtained employment
 RL Lost contact
 RN No Show
 RX From WPLEX to CM

Sanction

SA Sanction

Table 2. The Sequence of Component Codes Following Referral to ESD (RI)

Order	Code	First Freq.	Pct.	Code	Second Freq.	Pct.	Code	Third Freq.	Pct.	Code	Fourth Freq.
1	JW	1631	21.3	JS	753	12.7	FT	568	13.3	RI	346
2	RN	1487	19.5	RI	689	11.6	RB	528	12.4	FT	301
3	RB	1110	14.5	JI	676	11.4	JS	442	10.4	PT	239
4	JI	821	10.7	JW	562	9.5	RI	403	9.4	SA	224
5	JS	696	9.1	FT	528	8.9	PT	326	7.6	JS	223
6	FT	396	5.2	RB	465	7.8	SA	317	7.4	RB	212
7	PT	332	4.3	PT	390	6.6	RN	261	6.1	XU	149
8	RI	234	3.1	PR	378	6.4	JW	228	5.3	RN	134
9	XU	217	2.8	SA	366	6.2	XU	182	4.3	PR	129
10	SA	162	2.1	RN	263	4.4	JI	176	4.1	JW	128
Total		7642			5928			4265			2812

Table 3. The Sequence of Component Codes Following Non-Subsidized Employment (PT or FT)

Order	Code	First Freq.	Pct.	Code	Second Freq.	Pct.	Code	Third Freq.	Pct.	Code	Forth Freq.	Pct.	Code	Fifth Freq.	Pct.
1	PS	834	19.4	RI	245	11.7	FT	152	12.8	RI	81	11.6	RI	55	12.5
2	RI	759	17.7	FT	225	10.7	RI	134	11.3	FT	70	10.	FT	44	10.
3	RS	441	10.3	RS	178	8.5	PT	114	9.6	PT	53	7.6	PT	39	8.8
4	FT	376	8.8	PS	176	8.4	JI	79	6.6	JS	50	7.1	JS	32	7.3
5	PT	245	5.7	RN	157	7.5	PS	79	6.6	PS	45	6.4	RB	32	7.3
6	JS	223	5.2	PT	145	6.9	JS	75	6.3	SA	41	5.9	RN	30	6.8
7	XU	162	3.8	JS	129	6.1	RN	71	6.0	RN	40	5.7	JI	29	6.6
8	RB	140	3.3	JI	108	5.1	RS	70	5.9	JI	38	5.4	SA	21	4.8
9	RO	139	3.2	RB	93	4.4	RB	55	4.6	RB	38	5.4	PS	17	3.9
10	RN	98	2.3	JW	86	4.1	JW	47	3.9	JW	36	5.1	RS	17	3.9
Total		4291			2102			1191			700			441	

Table 4. Selected Paths of Component Codes Following Referral to ESD (RI)

Path	Code 1	Code 2	Code 3	Code 4	Code 5	Frequency	Percent
1						1388	15.4
2	RN					422	4.7
3	RB					343	3.8
4	FT					182	2.0
5	PT					120	1.3
6	JI					107	1.2
7	SA					102	1.1
8	RB	SA				94	1.0
9	RN	SA				90	1.0
10	RN	PR	SA			81	0.9
11	JW	JS	FT			79	0.9
12	JS					73	0.8
13	XU					69	0.8
14	JI	FT				62	0.7
15	JS	FT				61	0.7
16	JW	JI	FT			61	0.7
17	RN	PR				57	0.6
18	JW	JS				54	0.6
19	RN	FT				53	0.6
20	JW	JI				51	0.6
21	JW					42	0.5
22	JW	JS	RB			41	0.5
23	RI					40	0.4
24	RN	PT				40	0.4
25	JI	RB				32	0.4
26	RB	FT				32	0.4
27	RB	XU				31	0.3
28	JS	RB				29	0.3
29	JI	JS				28	0.3
30	RB	PT				28	0.3
31	JS	JW				27	0.3
32	JW	JI	JS	FT		27	0.3
33	RN	RI				27	0.3
34	JW	JS	PT			26	0.3
35	JW	JI	PT			25	0.3
36	PS					25	0.3
37	RN	RI	RN			24	0.3
38	RN	XU				23	0.3
39	XM					23	0.3
40	JW	FT				22	0.2
56	JW	JS	FT	PS		17	0.2
58	JS	JW	FT			16	0.2
63	JS	FT	PS			14	0.2
75	JW	JS	FT	RS		11	0.1
Total						9030	

Table 5. Selected Paths of Component Codes Following Non-Subsidized Employment (PT or FT)

Path	Code 1	Code 2	Code 3	Code 4	Code 5	Frequency	Percent
1						4914	53.4
2	PS					701	7.6
3	RS					321	3.5
4	FT					216	2.3
5	RI					160	1.7
6	PT					120	1.3
7	RB					57	0.6
8	JS					54	0.6
9	XM					51	0.6
10	RI	RN				50	0.5
11	RO					50	0.5
12	XP					50	0.5
13	XU					50	0.5
14	RN					48	0.5
15	SA					35	0.4
16	RX					32	0.3
17	XC					32	0.3
18	FT	PS				31	0.3
19	FT	RS				26	0.3
20	PR					24	0.3
21	JW					23	0.2
22	RI	RB				20	0.2
23	GE					19	0.2
24	HS					19	0.2
25	PS	FT				18	0.2
26	PS	RX				18	0.2
27	RI	PS				18	0.2
28	JS	FT				17	0.2
29	PS	RS				17	0.2
30	RI	JI				16	0.2
31	RI	FT				14	0.2
32	RS	PS				13	0.1
33	RL					12	0.1
34	RO	RS				12	0.1
35	JI					11	0.1
36	PS	PS				11	0.1
37	PT	PS				11	0.1
38	PT	RS				11	0.1
39	RS	FT				11	0.1
40	RS	RS				11	0.1
62	RI	JI	FT			7	0.1
63	RI	JS	FT			7	0.1
75	RI	JW	JI	JS	FT	5	0.1
Total						9205	

Table 6. Distribution of WorkFirst Person/Days with More than Once Service per Day

Number of persons/days	Frequency	Percent
2	26,594	89.1
3	2,905	9.7
4	306	1.0
5	22	0.1
6	5	0.0
Total	29,832	100.0